

Memorandum of Understanding  
Between

Verizon North Inc.  
f/k/a GTE North Incorporated (Verizon)

and

Tech Com, Inc. (Tech Com)

for the  
Mid-Span Fiber Meet (MSFM)  
located in

Richland Center, Wisconsin

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1. Purpose.

The purpose of this Memorandum of Understanding (MOU) is to memorialize the proposed MSFM arrangement between Verizon and Tech Com (individually a "Party" or collectively the "Parties") in Richland Center, Wisconsin. The terms and conditions set forth in this MOU have been agreed upon by both Parties pursuant to Article IV, Section 4.1.1 of the Interconnection Agreement between the Parties, which in this case constitutes an adoption, pursuant to Section 252(i) of the Telecommunications Act of 1996, of the interconnection agreement between GTE North Incorporated and CTC Communications such adoption becoming effective on August 24, 1999 (the "Interconnection Agreement"). Notwithstanding anything to the contrary in the interconnection agreement that immediately succeeds the Interconnection Agreement ("Successor Agreement"), this MOU shall stay in force until the earlier of (i) the latter of the expiration or termination of the Interconnection Agreement or the Parties' Successor Agreement, provided the Successor Agreement is placed into effect and contains terms specifically providing for agreement on MSFM arrangements; (ii) the Parties' agreement to modify or dissolve the MSFM arrangement. This MOU constitutes the entire agreement between the Parties on the subject matter hereof, and supersedes any prior or contemporaneous agreement, understanding, or representation as well as conflicting provisions of the Interconnection Agreement and Successor Agreement (notwithstanding anything to the contrary in said Interconnection Agreement or Successor Agreement), on the subject matter hereof, including any prior discussions, understanding and/or agreements concerning other methods of interconnection for exchange of the Parties' Reciprocal Compensation Traffic and Measured Internet Traffic in Verizon's Richland Center local calling area.

The Verizon/Tech Com MSFM arrangement shall be limited to delivery of terminating Reciprocal Compensation Traffic, Measured Internet Traffic and IntraLATA Toll Traffic only, or other traffic types as the Parties may agree to in writing. 911 Traffic for interconnection to a Verizon 911/E-911 Selective Router or 911 Tandem Office also shall be permitted to traverse the MSFM, as will Tandem Transit Traffic but in all other respects, unless expressly provided to the contrary herein, 911 Traffic and Tandem Transit Traffic shall be governed by the terms of the Parties' then-effective interconnection agreement. Tech Com may also order Access Toll Connecting Trunks (in conjunction with the Meet Point Billing arrangement, as governed by the terms of the Parties' then-effective interconnection agreement and consistent with the terms of this MOU) in order to jointly provision Switched Exchange Access Service to interexchange carriers ("IXCs") via the MSFM. This trunking arrangement will be employed for the sole purpose of allowing those Tech Com local service customers served by switches owned by Tech Com to connect or be connected to the interexchange trunks of third-party IXCs that are connected to Verizon's Dodgeville, Wisconsin access tandem. Tech Com agrees to provide separate trunk groups to provide Switched Exchange Access Service to IXCs. Without limiting the requirement that any type of traffic or services other than Reciprocal Compensation Traffic, Tandem Transit Traffic, 911 Traffic, IntraLATA Toll Traffic, and jointly-provisioned Switched Exchange Access Service to IXCs as specified above is forbidden to ride the MSFM unless otherwise agreed by the Parties in writing, the following types of traffic and services will not be placed on or ordered to ride the

MSFM: direct trunking to (or as) an IXC or other Special Access, point to point, end user or dedicated Access Services. Further, the MSFM may not be used to access unbundled network elements.

## 2. Site Selection.

Verizon and Tech Com have examined the MSFM sites and agree that the site for the MSFM will be the KEPTTEL Fiber Demarcation unit ("Keptel Unit") located on the outside of the east wall of the Tech Com building located at 261 S. Central Ave., Richland Center, Wisconsin. This site provides a suitable environment for both Parties to terminate their fiber optic cable and locate the connector panel for termination of their fiber optic cables.

## 3. Physical Interface.

The physical interface shall be considered the fiber patch panel in the enclosure box located at the location noted in Section 2 above. The connector panel is approved and appropriate for the application and the size cable to be connected. The connector panel location provides 24-hour access to both Verizon and Tech Com. The connector panel is individually locked. The interconnecting carrier shall splice its fiber to the fiber stub provided at the patch enclosure, at its own expense.

Verizon is to have access to the Verizon side of the MSFM and Tech Com will have access to the Tech Com side of the MSFM. Both Parties shall provide monitoring and maintenance capability 24 hours a day for their respective side of the MSFM.

## 4. Transmission Characteristics.

The transmission interface shall be SONET (Synchronous Optical Network) to ensure compatibility of signal format among different vendors of lightwave transmission equipment. The agreed upon interconnecting electronics requirements are as follows:

- a. The equipment generally complies with SONET transmission requirements as specified in Bellcore document GR-000253.
- b. The optical transmitters and receivers must provide adequate power for the end-to-end length of the fiber cable to be traversed.
- c. The optical transmission rate will be OC-12.
- d. Both Verizon and Tech Com shall provide 2 fibers of single-mode fiber cable each for the working and protect service between the MSFM terminating electronics of each party and the physical point of interconnection(s) as denoted in Section 3 above.
- e. The design of the MSFM shall meet optical parameters of GR-253-CORE, Tables 4-3 through 4-11.

## 5. Data Communications Channel (DCC).

The DCC shall be disabled between the Verizon and Tech Com locations.

6. Firmware/Software Upgrades.

Verizon will use a firmware release of 13.12 on a Nortel S/DMS Linear OC12 and Tech Com will utilize a Cisco 15454 multiplexer with a software release of 3.2.0. This combination of multiplexing equipment has been approved for use based on successful interoperability testing performed by the Verizon lab.

Any upgrades or changes to firmware/software by either Party must be reviewed and mutually agreed upon by the Parties before implementation. Before making any upgrade or change to firmware/software, each Party must provide the other Party with a written notice that describes the upgrade or change and states the date on which it will be added/loaded to the multiplexer. This written notice must be provided no less than 30 days before the date on which the upgrade or change will be added/loaded. The Parties will, within 14 days of the notified Party's receipt of such notice, meet telephonically or in person to discuss any desired review of the change or upgrade, and (unless otherwise agreed to by the Parties) will have determined whether such a change or upgrade is mutually agreeable at least 5 days prior to the notifying Party's proposed date of making the change or upgrade. The parties mutually agree to monitor the upgrade or change to observe for any failures or anomalies adversely affecting service or administration. If any upgrade or change to firmware/software by a Party adversely affects service or administration, that Party will immediately revert to the previous version of software/firmware.

7. CLLI<sup>®</sup>

The MSFM arrangement shall be assigned a CLLI<sup>®</sup> code consistent with Bellcore Common Language standards as outlined in TR 795-100-100. Verizon has assigned the CLLI<sup>®</sup> code RCCTWIXA3MD at the site of the Keptel Unit.

8. Connecting Facility Assignment (CFA) and Slot Assignment Allocation (SAA).

Tech Com shall control the CFA for the subtending facilities and trunks connected to its slots. The CFA information will be turned over to Tech Com as a final step of turn up of the MSFM facility architecture. For SAA, Verizon and Tech Com shall jointly designate the slot assignments for the ADMs in the MSFM arrangement.

9. Inventory and Provisioning.

Inventory of the MSFM facility shall be established in Verizon and Tech Com's OSSs before the order flow begins.

Verizon and Tech Com will initially provision the MSFM with an OC-12. Augments to the MSFM will be negotiated and agreed to on a case-by-case basis.

10. Provisioning, Maintenance and Restoration.

Provisioning, maintenance and restoration shall be as outlined in the CLEC guide found on Verizon's WISE Website. As a general matter, Verizon agrees to maintain the MSFM

from the Keptel Unit inward towards the Verizon network and Tech Com agrees to maintain the MSFM from the Keptel Unit inward towards the Tech Com network.

Each Party will provide the other Party a contact to coordinate provisioning and maintenance issues related to the MSFM arrangement. The phone number for Verizon's contact is (888) 420-7791 and the phone numbers for Tech Com contacts are:

Provisioning (320) 848-6641  
Maintenance (888) 454-5114 Wknds & Holidays  
(608) 537-2461 Normal Hours

#### 11. Compensation.

The Keptel Unit discussed in Section 2 will be provided, installed and paid for by Verizon.

Based on the individual circumstances of this MSFM arrangement, including the location of existing facilities, there will be no charges assessed by either Party to the other Party to construct and maintain the underlying facilities required to affect the facilities trunks traversing the MSFM.

If, however, if a Party to this MOU notifies the other Party that it does not intend to finish the construction of the MSFM arrangement or to use the MSFM arrangement before any traffic is exchanged over the MSFM arrangement, the notifying Party will compensate the other Party for any specific MSFM construction or implementation incurred by the other Party.

The following charges will apply:

Non-recurring charges:

There are no applicable NRCs applied by either party related to that portion of the MSFM that it provisions to transport Reciprocal Compensation Traffic, Measured Internet Traffic, Tandem Transit Traffic, 911 Traffic, or IntraLATA Toll Traffic to its terminating electronics..

There will be no Entrance Facility NRCs or muxing NRCs applied by either Party related to that portion of the MSFM that it provisions to transport Reciprocal Compensation Traffic, Measured Internet Traffic, Tandem Transit Traffic, 911 Traffic, or IntraLATA Toll Traffic to its terminating electronics.

Monthly recurring charges:

There will be no charges of any kind assessed by either Party for transporting Reciprocal Compensation Traffic and Measured Internet Traffic between the

terminating electronics of the MSFM where such traffic is ordered to ride the MSFM architecture. There will be no facility charges for IntraLATA Toll Traffic ordered to ride the architecture between the terminating electronics of the MSFM, otherwise compensation related to such IntraLATA Toll Traffic shall remain unaffected by this MOU. Verizon reserves its right to properly bill for transport of Tandem Transit Traffic across that portion of the MSFM that it has provided, whether on a per minute mile basis or on a prorated facilities basis, otherwise compensation related to such Tandem Transit Traffic shall remain unaffected by this MOU.

For Reciprocal Compensation Traffic and Measured Internet Traffic beyond the terminating electronics of either Party:

For Verizon-originated Reciprocal Compensation Traffic and Measured Internet Traffic traveling the MSFM and terminated by Tech Com, Verizon will pay fixed and per mileage transport (no Entrance Facility charges or multiplexing charges and no channel terminations) from Tech Com's terminating electronics of the MSFM to Tech Com's IP according to the rates established in the then-effective interconnection agreement or at applicable tariff rates.

For Tech Com-originated Reciprocal Compensation Traffic and Measured Internet Traffic traveling the MSFM and terminated by Verizon, Tech Com will pay fixed and per mileage transport (no Entrance Facility charges or multiplexing charges and no channel terminations) from Verizon's terminating electronics of the MSFM to the Verizon IP according to the rates established in the then-effective interconnection agreement or applicable Intrastate Switched Access Tariff on a direct trunk transport basis. Notwithstanding anything to the contrary in the then-effective interconnection agreement or this MOU, in the case of Extended Community Calling Traffic ("ECC Traffic"), as defined by the Wisconsin Public Service Commission in Docket 05-TI-119, where the switch serving the Verizon ECC Customer is a remote switch homed to Verizon's Richland Center (host) End Office, such transport will be provided and charges assessed at Verizon's applicable Intrastate Switched Access Tariff on a per minute mile basis between Verizon's terminating electronics of the MSFM and the ECC destination (which may include, as applicable, the following rate elements: Local Switching, Local Facility, Shared Trunk Port, Local Termination, Tandem Switching, Shared Multiplexing).

Transport to all Verizon non-ECC Customers served by remote switches that are homed to the Verizon Richland Center (host) End Office will be compensated solely through application of Verizon's applicable Reciprocal Compensation termination rate as provided for in the parties' then-effective interconnection agreement.

Reciprocal Compensation applies as appropriate.

Intercarrier compensation for Internet Traffic shall apply only if and to the extent required by applicable law in accordance with Section 12 (d), below.

12. Reciprocal Compensation Traffic Interconnection Points.

- a. A Party's Interconnection Point ("IP") shall be the point at which a Party who receives Reciprocal Compensation Traffic from the other Party assesses Reciprocal Compensation charges for the further transport and termination of that traffic.

- i) For purposes of this MOU, "Reciprocal Compensation Traffic" is Telecommunications traffic originated by a Customer of one Party on that Party's network and terminated to a Customer of the other Party on that other Party's network, except for Telecommunications traffic that is interstate or intrastate Exchange Access, Information Access, or exchange services for Exchange Access or Information Access. The determination of whether Telecommunications traffic is Exchange Access or Information Access shall be based upon Verizon's local calling areas as defined by Verizon. Reciprocal Compensation Traffic does not include:

- (1) any Internet Traffic (pursuant to the Order on Remand and Report and Order, *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications act of 1996, Intercarrier Compensation for ISP Bound Traffic*, FCC01-131, CC Docket Nos. 96-98 and 99-68, (adopted April 18, 2001) ("FCC Internet Order");
    - (2) traffic that does not originate and terminate within the same Verizon local calling area as defined by Verizon;
    - (3) Toll Traffic, including, but not limited to, calls originated on a 1+ presubscription basis, or on a casual dialed (10XXX/101XXXX) basis;
    - (4) Optional Extended Local Calling Scope Arrangement Traffic;
    - (5) special access, private line, Frame Relay, ATM, or any other traffic that is not switched by the terminating Party;
    - (6) Tandem Transit Traffic; or,
    - (7) Voice Information Service Traffic.

For the purposes of this definition, a Verizon local calling area includes a Verizon non-optional Extended Local Calling Scope Arrangement, but does not include a Verizon optional Extended Local Calling Scope Arrangement.

- ii) For purposes of this MOU, "Internet Traffic" is any traffic that is transmitted to or returned from the Internet at any point during the duration of the transmission.

- iii) For purposes of this MOU, "Measured Internet Traffic" is



dial-up, switched Internet Traffic originated by a Customer of one Party on that Party's network at a point in a Verizon local calling area, and delivered to a Customer or an Internet Service Provider served by the other Party, on that other Party's network at a point in the same Verizon local calling area. Verizon local calling areas shall be as defined by Verizon. For the purposes of this definition, a Verizon local calling area includes a Verizon non-optional Extended Local Calling Scope Arrangement, but does not include a Verizon optional Extended Local Calling Scope Arrangement. Calls originated on a 1+ presubscription basis, or on a casual dialed (10XXX/101XXXX) basis, are not considered Measured Internet Traffic.

iv.) For purposes of this MOU, Tandem Transit Traffic is Telephone Exchange Service Traffic that originates on Tech Com's network, and is transported through a Verizon Tandem to the Central Office of a CLEC, ILEC other than Verizon, Commercial Mobile Radio Service (CMRS) carrier, or other LEC that subtends the relevant Verizon Tandem to which Tech Com delivers such traffic. Neither the originating or terminating customer is a Customer of Verizon. Subtending Central Offices shall be determined in accordance with and as identified in the Local Exchange Routing Guide (LERG). Switched Exchange Access Service Traffic is not Tandem Transit Traffic.

v.) For purposes of this MOU, Extended Local Calling Scope Arrangement is an arrangement that provides a Customer a local calling scope (Extended Area Service "EAS"), outside of the Customer's basic exchange serving area. Extended Local Calling Scope Arrangements may be optional or non-optional. As and to the extent required by the Public Service Commission of Wisconsin in Docket 05-TI-283, Extended Community Calling ("ECC") Traffic, as defined in the Public Service Commission of Wisconsin's docket 05-TI-119, shall be considered to be a non-optional Extended Local Calling Scope Arrangement for purposes of this MOU.

- b. Except as otherwise agreed by the Parties in writing, the IP from which Tech Com will provide transport and termination of Reciprocal Compensation Traffic to its Customers located within the Verizon Richland Center local calling area ("Tech Com-IP") shall be its Richland Center End Office (RCCTWIAUDSO) (which is located within the Verizon Richland Center local calling area where Tech Com has assigned telephone numbers to its

Customers to be served pursuant to its Interconnection Agreement). Nothing in this MOU shall be read to affect Tech Com's obligation, for each LATA in which Tech Com requests to interconnect with Verizon except as otherwise agreed by the Parties, to establish a Tech Com-IP in each Verizon local calling area where Tech Com chooses to assign telephone numbers to its Customers consistent with the methods of interconnection and interconnection trunking architectures outlined in its interconnection agreement with Verizon.

- c. Except as otherwise agreed by the Parties in writing, the IP from which Verizon will provide transport and termination of Reciprocal Compensation Traffic to its Customers ("Verizon-IP") shall be as follows:
  - i) For Reciprocal Compensation Traffic delivered by Tech Com to the Verizon Tandem subtended by the terminating End Office serving the Verizon Customer, the Verizon IP will be the Verizon Tandem switch.
  - ii) For Reciprocal Compensation Traffic delivered by Tech Com to the Verizon terminating End Office serving the Verizon Customer (including Verizon Customers served by a Verizon remote switch that is homed to the Verizon End Office), the Verizon IP will be the Verizon End Office switch.
- d. Nothing in this MOU shall affect what types of traffic are subject to Reciprocal Compensation charges in accordance with Section 251(b)(5) of the Act, which shall be governed by the Parties then-current interconnection agreement, provided that, notwithstanding anything to the contrary in this MOU, pursuant to the FCC Internet Order, Reciprocal Compensation charges will not apply to Internet Traffic and the determination of whether traffic is Reciprocal Compensation Traffic or Internet Traffic, and the Parties' rights and obligations with respect to any intercarrier compensation that may be due in connection with their exchange of Internet Traffic, shall be governed by the terms of the FCC Internet Order, or as otherwise may be provided, as applicable, in the Parties' then-current successor interconnection agreement.

### 13. Definitions.

Except as specifically provided herein, unless the context clearly indicates otherwise, when used in this MOU all capitalized terms shall have the meaning set forth in the then effective interconnection agreement (i.e., the Interconnection Agreement or the Successor Agreement). If a term is not defined in this MOU or the then effective interconnection

agreement, said term shall have the meaning stated in the Act. If a term is not defined in this MOU, the then-effective interconnection agreement, or the Act, said term shall be construed in accordance with its usage in the telecommunications industry as of the effective date of this MOU, or absent such usage, its common meaning.

IN WITNESS WHEREOF, the Parties have caused this MOU to be executed and delivered by their duly authorized representative under seal as of the date first set forth below.

**Signatures**

\_\_\_\_\_  
Verizon North Inc.  
f/k/a GTE North Incorporated

\_\_\_\_\_  
Date

\_\_\_\_\_  
Tech Com, Inc.

\_\_\_\_\_  
Date